



CITY OF SAN MATEO

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Agenda Report

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TO: Sustainability and Infrastructure Commission

FROM: Christina Horrisberger, Interim Assistant City Manager

PREPARED BY: City Manager's Office

MEETING DATE: September 13, 2023

SUBJECT:
Sustainable Buildings Strategy – Project Update

RECOMMENDATION:

Receive an update on the development of "Electrify San Mateo – Building for the Future: City of San Mateo Sustainable Buildings Strategy."

BACKGROUND:

This item was published as part of the August 9, 2023 Sustainability and Infrastructure Commission (SIC) meeting agenda. Due to a lack of quorum at the August 9th meeting, this item was not discussed and rescheduled for the September 13, 2023 SIC meeting. An update was made to Attachment 2 which will be discussed later in this report. Public comments submitted for the August 9th meeting are provided as Attachment 3.

Building energy use represents 38% of communitywide greenhouse gas emissions in San Mateo and in January 2022, the City Council prioritized the decarbonization of existing buildings to help meet the City's climate goals. The decarbonization or electrification of buildings refers to the transition from gas equipment to electric equipment for space and water heating, clothes drying, cooking and more. In San Mateo, Peninsula Clean Energy (PCE) provides electricity that is 50% renewable and virtually 100% carbon free and PCE is committed to delivering 100% renewable and carbon free electricity by 2025. Electrifying existing buildings is key to further reducing communitywide greenhouse gas emissions and technical analysis and community engagement are needed to develop a roadmap to clean energy buildings in San Mateo.

Staff released a Request for Proposals (RFP) seeking an experienced team knowledgeable in decarbonization policy planning, analysis, and implementation, to develop a decarbonization strategy that centers on equity and promotes a collaborative pathway to electrification. The RFP opened on November 22, 2022 and closed on January 10, 2023 and four consulting firms responded. After review of the proposals and consultant interviews, staff selected Rincon Consultants, Inc. because of their compelling approach to analysis and outreach and their experience with developing a similar strategy for other cities. The City Council approved an agreement with Rincon for this project at the March 20, 2023 City Council meeting. This project, which is now titled, "Building for the Future: City of San Mateo Sustainable Buildings Strategy," launched in May 2023.

This report provides an overview of the project and summarizes the local building electrification policy context, presents two deliverables from the Rincon team: the policy analysis framework, and building inventory and market segmentation analysis.

Project Overview

The goal of this project is to develop the City of San Mateo Sustainable Building Strategy to electrify San Mateo's existing building stock. The strategy document will be organized around specific policy pathways and actions for both residential

and nonresidential buildings. The project will result in an actionable roadmap with steps for the City of San Mateo to electrify buildings. The approach must be cost effective while also helping the City in reaching climate goals and greenhouse gas emission reduction targets. In addition to using the best available science and data, this project will also utilize a community driven approach that includes two phases of community outreach. The consultants will evaluate the City Council's proposed 2030 "End of Flow" target date for the termination of fuel gas infrastructure and assess a suite of policy options, including the *Bay Area Reach Codes Model Existing Building Decarbonization Ordinance* with a January 1, 2025 target date for requiring electric appliances upon replacement.

Local Policy Context

As part of the FY 2022-2023 goal setting session, the City Council directed staff to establish policies to decarbonize and electrify existing buildings and eliminate natural gas use by 2030. The City's Climate Action Plan also identifies electrifying existing buildings as a key strategy to reduce communitywide greenhouse gas emissions. The City promotes electrification through marketing electric appliance rebates and incentives and hosting workshops. Additionally, the City adopted reach codes to require and encourage building electrification. In 2020, the City Council adopted an ordinance requiring all residential and office buildings be all-electric starting on January 1, 2021. In 2022, the City Council approved an ordinance that expanded the all-electric requirement to *all* new buildings and requires electric-readiness and electric appliances for specific home remodels as of January 1, 2023.

At the regional level, in May 2023, the Bay Area Air Quality Management District (BAAQMD) adopted zero nitrogen oxides (NOx) standards that will prohibit the sale and installation of gas water heaters starting in 2027 and gas furnaces in 2029 in the nine-county Bay Area. These standards are the most ambitious in the country and outpace the state's goal of banning the sale of new gas furnaces and water heaters throughout the state starting in 2030. These policy efforts drive California closer to the ambitious climate goal of carbon neutrality by 2045.

Analysis Framework Memo

The Analysis Framework Memo (Attachment 1) outlines the proposed framework for the development of the Sustainable Buildings Strategy. The framework reviews electrification co-benefits, equity criteria, and effectiveness criteria.

The concept of Energy Equity recognizes that disadvantaged communities have been historically marginalized and overburdened by pollution, underinvestment in clean energy infrastructure, and lack of access to energy efficient housing and transportation (Department of Energy, Office of Energy Efficiency and Renewable Energy). The initial draft of the equity criteria proposed for the Sustainable Buildings Strategy for the City's consideration are summarized below and provided in greater detail in the memo and primarily off existing resources like the Department of Energy, Rocky Mountain Institute, and Greenlining Institute:

- Ensure equitable access to health, safety, and comfort benefits
- Encourage concurrent housing condition improvements
- Advance energy equity
- Support high-road job opportunities
- Maximize ease of installation
- Promote affordable housing and prevent renter displacement

The equity criteria will be updated based on feedback gained through community outreach and engagement, especially with feedback from renters, disadvantaged communities, and small local businesses.

In addition to being equitable, the Sustainable Buildings Strategy must be effective. Broader "effectiveness criteria" are used in addition to the equity criteria to ensure the benefits of electrification are fully realized and do not come at the cost of other City priorities and projects and do not harm residents and business owners. The draft criteria are below:

- **Cost-effective:** Ensure that costs associated with new requirements are minimized or offset through funding and financing strategies for residents and business owners and efficiently use limited City, PCE, and other resources.
- **Feasible:** Ensure that electrification policies effectively reflect the most up-to-date electrification practices and regulatory requirements, considering long-term legal viability and thus; enforceability by the City

- **Measurable and Sustained Impact:** Ensure that electrification policies are impactful and enforceable and will provide evidence-based results of greenhouse gas emission reduction over the long-term.
- **Reliable:** Ensure that energy security and reliability are preserved or improved throughout the community in the long-term.
- **Enforceable:** allowing for continued City monitoring and enforcement of selected electrification policy

After incorporating SIC and community feedback, the effectiveness criteria will be finalized and utilized to evaluate, modify, and improve the equity and effectiveness of the initiatives and actions to be included in the Sustainable Buildings Strategy.

Building Inventory and Market Segmentation Memo

To develop an equitable, implementable, and effective Sustainable Building Strategy, understanding the existing building stock and energy usage is critical. Rincon developed the Building Inventory and Market Segmentation Memo (Attachment 2) that includes an analysis of building stock, building vintage, and appliance fuel source for residential, multifamily and commercial buildings. This memo was updated since the August 9th meeting to include updated rebate amounts from Peninsula Clean Energy. Rebate amounts are \$1,000 less and electrification marginal costs and cost savings are updated accordingly. The project team also summarized estimates for the various costs associated with building electrification. Part of this analysis includes investigating the up-front appliance costs for electrification, the cost of other upgrades that may be required to convert energy usage in buildings from gas to electricity, and the financial incentives currently available. On-bill costs are also an important factor but were not yet available at the time of this report and will be presented orally during the meeting. This memo will help the City in developing educational materials for the community as well as informing future policy development.

Next Steps

The project team is moving into the first round of community engagement. Broadly, community engagement throughout this process is to educate the community and decisionmakers on the building electrification process and how it provides co-benefits and supports accomplishing the City's GHG reduction targets. There is also a need to educate the community and decisionmakers on the incentives and costs for building electrification to increase widespread access to incentives. The project team aims to generate support and buy-in from key interested parties and establish an equitable public engagement process by identifying and removing barriers for meaningful community-wide participation. The team is also challenged to achieve broad demographic and geographic representation from key interested parties, especially hard-to-reach communities and those who do not typically engage in City processes, by partnering with trusted community groups and advisors.

In this first round of outreach, the goal will be to specifically collect community feedback to refine equity and effectiveness criteria to reflect community priorities and build widespread understanding of the local building and cost conditions for building electrification in San Mateo.

The next presentation to the SIC is tentatively scheduled for January 10, 2024 to present on the prioritized decarbonization policies for each building type and to report out on community feedback. Meanwhile, the project team will work on the draft prioritized policies list and incorporate community feedback. Staff is planning for another phase of outreach in Spring 2024 to solicit feedback on the prioritized policy list. Staff is anticipating a City Council Study Session on the draft policies before returning to the SIC in April 2024 with the proposed strategy document. Following SIC approval and recommendation, the project team would present at a City Council meeting for approval and adoption.

BUDGET IMPACT:

The project has no impact to the City's General Fund. Funding for the project was approved at the March 20, 2023 City Council meeting. The funding was appropriated from the Advance Planning Fund (Fund 225).

ENVIRONMENTAL DETERMINATION:

This informational report is not a project subject to CEQA, because it can be seen with certainty that it will not cause a

physical change in the environment. (Public Resources Code Section 21065.)

NOTICE PROVIDED

All meeting noticing requirements were met.

ATTACHMENTS

Att 1 - Analysis Framework Memo

Att 2 - Building Inventory and Market Segmentation Memo

Att 3 - Public Comment

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